Amendments to the Claims:

Listing of the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

- 1. (Currently amended) An isolated polynucleotide which is 1080 nucleotides in length and comprises the nucleic acid sequence set forth in -comprising a sequence selected from the group consisting of:
- (a) a nucleic acid sequence of at least 200 nucleotides which is a portion of SEQ ID NO:1 or the complete complement thereof; and,
- (b) a nucleic acid sequence of at least 200 nucleotides which hybridizes to SEQ ID NO:1 or the complement thereof, under stringent conditions.
- 2. (Canceled)
- 3. (Currently amended) An isolated polynucleotide which is 1080 nucleotides in length and comprises emprising a sequence which encodes a full-length EDG1 protein or a functional equivalent thereof, wherein said full-length EDG1 protein comprises SEQ ID NO. 2., and wherein said functional equivalent comprises a sequence which is at least 85% identical to SEQ ID NO. 2.
- 4. (Canceled)
- 5. (Canceled)
- 6. (Original) The isolated polynucleotide of claim 3 wherein said polynucleotide comprises part of an expression vector, a viral genome, or a liposome.
- 7. (Withdrawn) An isolated EDG1 protein or a protein which is functional equivalent said EDG1 protein, wherein said EDG1 protein comprises SEQ ID NO. 2., and wherein said functional equivalent comprises a sequence which is at least 85% identical to SEQ ID NO. 2.
- 8. (Withdrawn) The isolated protein of claim 7 wherein said protein is a functional equivalent of said EDG1 protein and is immunologically cross reactive with an antibody raised using said EDG1 protein as an immunogen.
- 9. (Withdrawn) The isolated protein of claim 7 wherein said protein is a functional equivalent of said EDG1 protein and inhibits proliferation of MCF7 cells.
- 10. (Withdrawn) The isolated protein of claim 7 wherein said protein is a fusion protein and comprises a tag for labeling or isolating said protein.
- 11. (Withdrawn) A polypeptide which comprises a contiguous sequence within SEQ ID NO. 2, wherein said contiguous sequence is at least 8 amino acids in length, and wherein said polypeptide is a functional equivalent of human EDG1 protein.

- 12. (Withdrawn) The polypeptide of claim 11 wherein said polypeptide is immunologically cross-reactive with an antibody raised using EDG1 protein as an antibody.
- 13. (Withdrawn) The polypeptide of claim 11 wherein said polypeptide inhibits proliferation of MCF-7 cells.
- 14. (Withdrawn) The polypeptide of claim 10, wherein said polypeptide comprises SEQ ID NO. 3.
- 15. (Withdrawn) An antibody which binds to one or more epitopes in human EDG1 protein, wherein said EDG1 protein comprises SEQ ID NO. 2.
- 16. (Withdrawn) The antibody of claim 15 wherein said antibody is a monoclonal antibody.
- 17. (Withdrawn) A method of detecting cancerous cells in a biological test sample obtained from a subject known to have or suspected of having a cancer selected from the group consisting of breast cancer, testicular cancer, prostate cancer, uterine cancer, cervical cancer, ovarian cancer, and colon cancer, comprising:
- a) contacting the test sample with anti-EDG1 antibody under conditions wherein binding of said antibody to EDG1 protein occurs; and
- b) assaying for a complex between the antibody and a protein in the test sample, wherein a decrease in the level of the antigen-antibody complex in the test sample, as compared to the level of the antigen-antibody complex in a control sample, indicates that the test sample contains or was derived from cancerous cells.
- 18. (Withdrawn) The method of claim 17 wherein the test sample is a tissue sample or cell sample, and wherein said test sample is assayed by an immunocytochemical procedure which permits a determination of the intracellular location of the antigen-antibody complex.
- 19. (Withdrawn) A method of detecting cancerous cells in a biological test sample obtained from a subject known to have or suspected of having a cancer selected from the group consisting of breast cancer, testicular cancer, prostate cancer, uterine cancer, cervical cancer, ovarian cancer, and colon cancer, comprising:
- assaying for EDG1 transcript in said test sample, wherein a decrease in the level of said EDG1 transcript in said test sample, as compared to the level of said EDG1 in a corresponding control sample, indicates that the test sample contains or was derived from cancerous cells.
- 20. (Withdrawn) The method of claim 19 wherein said sample is assayed by contacting said sample with a polynucleotide which is complementary to a contiguous sequence in SEQ ID NO.1 under stringent hybridization conditions.
- 21. (Withdrawn) The method of claim 19 wherein said sample is assayed by a reverse-transcriptase polymerase chain reaction which employs a primer derived from SEQ ID NO. 1.
- 22. (Withdrawn) A method for decreasing proliferation of cancer cells selected from the group consisting of a breast cancer cells, prostate cancer cells, testicular cancer cells, ovarian

Appl. Ser. No. 09/972,758; Examiner Ungar, Susan.; Art Unit 1642 Amendment . Response to Office Action Dated July 10, 2003

cancer cells, uterine cancer cells, cervical cancer cells, and colon cancer cells, said method comprising increasing EDG1 protein activity in said cells.

- 23. (Withdrawn) The method of claim 22 wherein levels of EDG1 protein activity in said cells is increased by contacting the cells with EDG1 protein, a functional equivalent of EDG1 protein, or a biologically active fragment of EDG1 protein under conditions which permit uptake of said protein, said functional equivalent or said biologically active fragment, respectively.
- 24. (Withdrawn) The method of claim 22 wherein EDG1 protein activity is increased in said cells by contacting said cells with a nucleic acid comprising:
- i) a sequence encoding EDG1 protein, a functional equivalent of EDG1 protein, or a biologically active fragment of EDG1 protein, and
- ii) a promoter active in the cancer cell, wherein the promoter is operably linked to the sequence encoding EDG1 protein, a functional equivalent of EDG1 protein, or a biologically active fragment of EDG1 protein, respectively, under condition permitting uptake of said nucleic acid by the cancer cell.
- 25. (Canceled)
- 26. (Canceled).